Take Test: Quiz 2.5

Test Information

Description	
Instructions	
Multiple Attempts	This test allows multiple attempts.
Force Completion	This test can be saved and resumed later.

QUESTION 1

1 points Saved

Which of the following describes the force induced by a spring with spring constant k and displacement x?

- $+kx$
- $-k\dot{x}$
- $k\dot{x}$
- $-kx$

QUESTION 2

1 points Saved

Which of the following describes the force induced by a damper with damping constant b and speed $\dot{x}$?

- $+bx$
- $b\dot{x}$
- $-b\dot{x}$
- $-bx$

Question Completion Status:

Which one of these statements is NOT correct?

- A spring-mass-damper system conserves energy, meaning that no energy is lost over time.
- A damper-mass system dissipates energy, meaning that energy is lost over time.
- An ideal spring-mass system conserves energy, meaning that no energy is lost over time.
- A spring-mass-damper system dissipates energy, meaning that energy is lost over time.

QUESTION 4 **1 points** Saved

Which of these equations describes Newton's law?

- $\sum$ current in = $\sum$ current out
- $\sum F = mx(t)$
- $\sum F = m\ddot{x}(t)$
- $F = \sum m\dot{x}(t)$

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers Save and Submit